

APPENDIX B: CLAIMS IN MARKED-UP FORM

1. (AMENDED) A diode laser assembly, comprising:
a substrate;
an epitaxial structure formed on the substrate;
a laser formed in the epitaxial structure and producing a tunable laser output; and
an amplifier formed in the epitaxial structure, at least a portion of the laser and amplifier sharing a common waveguide, the tunable laser output being coupled to the amplifier along the common waveguide, and the amplifier generating an optical signal in response to the coupled tunable laser output, wherein at least a portion of the waveguide is curved and an end of the waveguide terminates at an oblique angle to an output facet.
16. (AMENDED) The assembly of claim [23] 15, wherein a flared portion of the waveguide is in an active region.
17. (AMENDED) The assembly of claim [23] 15, wherein a flared portion of the waveguide is in a passive region.
25. (AMENDED) The assembly of claim [32] 23, wherein the second active region has an oblique proximal face.
44. (AMENDED) A diode laser assembly, comprising:
a first semiconductor layer in an epitaxial structure;
a second semiconductor layer formed in the epitaxial structure, the first and second semiconductor layers having different dopings;
a waveguide layer formed between the first and second semiconductor layers, the first waveguide layer including a waveguide, a first reflector and a second reflector;
[a] an optically active medium disposed between the first and second reflectors, the first and second reflectors defining a laser cavity and producing a tunable laser output; and
an amplifier formed in the epitaxial structure, wherein the laser cavity and the amplifier are optically aligned, the tunable laser output being coupled into the amplifier along the waveguide, and the amplifier generating an optical signal in response to the coupled tunable laser output, wherein at

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least a portion of the waveguide is curved and an end of the waveguide terminates at an oblique angle to an output facet.

47. (AMENDED) The assembly of claim [66] 45, wherein the waveguide extends through the first active region and the passive region.

48. (AMENDED) The assembly of claim [57] 44, wherein a distal portion of the waveguide in the amplifier is curved.

49. (AMENDED) The assembly of claim [57] 44, wherein a distal end of the waveguide in the amplifier terminates at an oblique angle to an output facet

50. (AMENDED) The assembly of claim [66] 45, wherein the waveguide includes a mode adapter.

57. (AMENDED) The assembly of claim [66] 45, wherein the first and second active regions are separated by a passive region.

